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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,107	02/03/2005	Yutaka Inoue	1254-0268PUS1	8412
2292 7590 05/09/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER A. MINH D				
ART UNIT 2821		PAPER NUMBER		
NOTIFICATION DATE 05/09/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/523,107

Applicant(s)

INOUE ET AL.

Examiner

MINH D. A

Art Unit

2821

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed on 1/9/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 87-100 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 98-100 is/are allowed.
- 6) ☒ Claim(s) 87-89 and 93-100 is/are rejected.
- 7) ☒ Claim(s) 90-92 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is a response to the Applicant's amendment submitted on 01/09/008. In virtue of this amendment, claims 97-100 are newly added; and thus, claims 87-100 are currently presented in the instant application.

Claim Objections

1. Claims 87-100 are objected to because of the following informalities:

Regarding independent claims 87-88, 94 and 98, the term "near" the scope the claims are vague, since it is not known what is intended by the term. It is not known how near or how close to connect the fluorescent tube and it is not understood at what point the distance to the ends of the fluorescent tube becomes "near".

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Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 88-89, 93-95 are rejected under 35 U.S.C. 102(b) as being anticipated by Honbo et al (U. S Patent No: 6, 087, 757).

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Regarding claim 87, Honbo et al disclose in figure 2, a backlight apparatus, comprising a long tubular fluorescent tube (11); and a pair of inverter transformers (12 and 14) for converting input voltages into high voltages and supplying high voltages having opposite phases to the ends of the fluorescent tube (11)(col.7, lines 5-9), wherein each of the pair of inverter transformers (12 and 14) is connected to the ends of

the fluorescent tube(11) for supplying the high voltages to the fluorescent tube(11).

See figures 2.

Regarding claim 88, Honbo et al disclose a driving circuit of piezoelectric transformers comprising a long tubular fluorescent tube (11); a pair of inverter transformers(12 and 14) for converting input voltages into high voltages and supplying high voltages having opposite phases to the ends of the fluorescent tube (11)(col.7, lines 5-9), and the other inverter transformer(14) is disposed the other end of the fluorescent tube(11).,See figure 2.

Regarding claim 89, Honbo et al disclose, wherein each of the pair of inverter transformers is provided in each of a pair of inverter circuits (12 and 14). Figure 2.

Regarding claim 93, Honbo et al disclose wherein the backlight apparatus for a liquid crystal panel. Col.2, lines 30-36.

Regarding claim 94, Honbo et al disclose, a driving circuit of piezoelectric transformers comprising an inverter circuit used in a pair for driving a long fluorescent tube provided in a backlight apparatus, wherein, when a pair of the inverter circuits (12 and 14),are used for driving the fluorescent tube, one of the pair is positioned one end of the fluorescent tube and the other is disposed near the other end of the fluorescent tube_{same comments as above with respect to the term "near"}

Regarding claim 95, Honbo et al disclose, wherein a long fluorescent tube, the apparatus comprising a pair of the inverter circuits of claim 94 for driving the fluorescent

tube, *Allowable Subject Matter*

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4. Claims 90-92 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. Claims 98-100 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter:

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Prior art fails to disclose or fairly suggest that, a plurality of the fluorescent tubes; and a plurality of the pair of inverter circuits, wherein the plurality of the fluorescent tubes are disposed in parallel to one another so that the longitudinal directions thereof are substantially oriented to the same direction, and wherein at least a pair of inverter circuits, which are positioned on the same-end side of the plurality of the fluorescent tubes disposed in parallel such that the inverter circuits are adjacent to each other in the direction in which the plurality of the fluorescent tubes are disposed, the inverter circuits being connected in a synchronized manner recited in dependent claim 90.

Prior art fails to disclose or fairly suggest that, a plurality of the fluorescent tubes, wherein the plurality of the fluorescent tubes are disposed in parallel to one another so that the longitudinal directions thereof are substantially oriented to the same direction, the apparatus further comprising a plurality of the pair of inverter transformers for supplying high voltages having opposite phases to the ends of each of the plurality of the fluorescent tubes recited in dependent claim 91.

Prior art fails to disclose or fairly suggest that Prior art fails to disclose or fairly suggest that, a plurality of the fluorescent tubes, wherein the plurality of the fluorescent tubes are disposed in parallel to one another so that the longitudinal directions thereof are substantially the same, wherein the pair of inverter transformers each have a plurality of secondary windings for outputting high voltages, and wherein voltages from the plurality of secondary windings of one of the pair of inverter transformers are supplied to the same ends of adjacent fluorescent tubes of the plurality of the fluorescent tubes recited in dependent claim 92.

Remarks and conclusion.

6. Applicant's arguments filed 1/09/08 have been fully considered but they are not persuasive.

In response to Applicants's argument on the independent claims 87, 88 and 94 in the fifth paragraph at page 6 that "independent claims 87-88 and 94 recite a combination of elements including a pair of inverter transformers (inverter circuits, 94) each positioned near opposite ends of a fluorescent tube. Honbo et al do not disclose this feature; nor is the feature obvious." it is noted that Honbo et al disclose, in figure 2, wherein each of the pair of inverter transformers (12 and 14) directly is connected to the ends of the fluorescent tube(11) for supplying the high voltages to the fluorescent tube(11) each positioned opposite ends of the fluorescent tube. See figures 2. In view of the aforementioned, claims 88-89, 93, 95-97 remain rejected as being anticipated by Honbo et al.

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7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Inquiry

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2: 45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Owens Douglas W can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR

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only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Minh A

Art Unit 2821

Date 4/21/08

/Douglas W Owens/
Supervisory Patent Examiner, Art Unit 2821
April 28, 2008